Training For the Can Lake 50 Ultras

The primary focus of this article is to assist first time ultrarunners and first-time 50-mile ultrarunners to have a successful run around Canandaigua Lake. The secondary focus is to provide information useful to experienced ultrarunners seeking to run a more competitive race or make the transition from trail ultras to a road ultra.

Can Lake 50 Specifics

Over the past five years, first time ultrarunners have done remarkably well. **129 of 136** first-time starters have finished the full 50 miles around the lake, and **75 of 78** first time starters in the 50K have finished.

Ultramarathon 101

What is an ultra?

An ultra is any running event over a distance greater than the marathon (26 miles, 385 yards). Ultras are run on trails, roads, and track. Twenty-five years ago, most North American ultras were run on certified road courses. Today, most North American ultras are trail races.

Most ultras are run over set distances (from 50K to 3100 miles). The 50K is the most popular race distance today. Some ultras are run for set time periods (6 hours to 6 days or more); the winner in these races is the person who covers the greatest distance in the allotted time. These races are a unique mental challenge because running faster doesn't make the race end sooner.

Can Lake 50 Specifics

The 50-mile course is one big loop around a beautiful lake. The route is mostly flat to rolling roads with four major climbs including locally famous Bopple Hill and Bare Hill, the last major climb.

The 50K course is point-to-point over the final 31 miles of the 50-mile route, including the many scenic parts of the full loop and two major climbs. The second climb, up Bare Hill Road, is the biggest challenge.

Both distances include too many hills to be the easiest ultramarathon in the region; that honor goes to the BPAC 6 Hour Endurance Challenge (run as many miles as you can in 6 hours on a flat 3.25 mile loop). However, because the Can Lake 50 is a road race, it is significantly easier to finish than any of the area trail races of the same distance. And, you can look at the spectacular scenery without risking tripping on rocks and roots.

Why run ultras?

Achievable Challenge. While it may not be possible to run much faster (say, a 2:20 marathon), it is possible to run longer and farther than you ever believed possible. A huge range of ultra race distances and types ensures that you won't run out of challenges.

Friendship and Camaraderie. The ultra world is a small world. You will know your competition; you can run in the same race with national champions and world-class runners.

Every finisher is a winner. For many runners, finishing is the main goal -- which may explain the large number of races with extreme challenges (hills, mud, rocks, heat, cold, etc).

Can Lake 50 Specifics

50 Mile. Completing the Can Lake 50 is a spectacular "achievable challenge." The most popular distance is the full 50 miles, probably because running all the way around the lake is so satisfying. It is way cool to go down to Lakeshore Drive after finishing and look out at the lake and realize that you've just run around the whole thing. Finishing under the 12 hour time limit only requires a 14:20 per mile average pace... you don't need to be a fast runner to finish; you can walk all the hills and follow a run/walk strategy on the flatter sections and still easily finish within the time limit. If you think you might need more time (e.g., your flat

road marathon times are in the 5 hour range), please request an early start time. With a 6am start, you only have to average 15:30 per mile to finish before the 7pm time limit.

50K. The 50K is an even more "achievable challenge," ideal for a first ultra or for those years when your training is inadequate for a full fifty miler. If you are fit enough to finish a marathon in five hours, you should have no trouble finishing the 50K under the 9 hour time limit. Just walk all the hills and follow a run/walk strategy to average under 17:20 per mile.

Age Graded Medals for Both Races. For runners looking for a challenge beyond just completing the distance, the Can Lake 50 also gives every runner (male or female at any age) an equal chance to win a gold or silver medal. The Gold standard represents 65% of the World Masters Athletics (WMA) standard for each age. It's a tough but achievable performance. The Silver standard is significantly easier to achieve at 55% of the WMA standard for each age. Last year, approximately 5% of the 50 mile & 50K finishers received Gold medals and 30% received Silver medals. Bronze medals were awarded to the remainder of the field in both races.

Ultras are Different

Like marathons, aid stations have food & drink; but unlike marathons, the aid stations are farther apart. Most runners carry water bottles and some runners carry food.

Ultras often go where there are no rest rooms. Carry your own toilet paper and be prepared to go in the woods. Carry your favorite anti-chaffing treatment (e.g., a small tube of *Vaseline*).

Roads are open to traffic with limited road marshals. Route markings can be easy to miss and the markers are sometimes removed -- which means runners are expected to be aware of the race route and take some responsibility for not getting lost.

Weather conditions can change drastically during a long race. A cold morning can be followed by a hot afternoon. Rain storms may blow through. Drop bags transported by race personnel to aid stations can be used for rain gear, dry clothes and favorite food & drink.

Some races allow runners to have a handler who meets them along the race route and provides aid, change of clothes, shoes, etc. In long road and trail events, runners often can have a pacer run with them for the last part of the race. Pacers can help keep runners safe and on course by being an extra set of eyes and ears.

Can Lake 50 Specifics

Be Prepared. You will be out on the road a long time and the aid stations are much farther apart than you would have in a big city marathon. You should carry the following items at a minimum:

- water bottle (a 16 or 20 ounce bottle should be enough to get you to the next aid station)
- toilet paper (carry in a zip lock bag, have enough for a couple of uses)
- some of your favorite ultra snack so you can eat while walking the hills (gels or *Chomps* work well, but please do not litter the course)
- your mobile phone

You may want to have some of the following with you, especially if you've needed them in previous races:

- Ibuprofen (some aid stations will also have this item)
- your favorite anti-chaffing cream (some aid stations will have Vaseline)
- electrolyte tablets (the aid stations will have electrolyte tablets)
- any medications you might need for allergies, bee stings, etc.

Depending on the weather on race day, you may need to carry a rain jacket. You can also have drop bags transported to some of the aid stations.

Aid Stations. While the Can Lake 50 aid stations are relatively close together (from 2.8 to 4.9 miles apart),

you should carry a water bottle and have it refilled at the aid stations. If you prefer to use a hydration pack, e.g., *CamelBak*, etc., be sure to it can be quickly refilled. Aid stations will have water and *GU Electrolyte Brew* to refill your bottle and a cola drink in cups. Since the cola drink is carbonated, your best bet is to drink the cola while at the aid station.

The aid stations also will have the usual ultramarathon snacks -- cookies, pretzels, bananas, etc. and *GU Energy Gels* or *Chomps*. You should test your equipment, food and drink on long runs prior to race day. If you find you need food or drink that won't be available at the aid stations, you will have to carry what you need and refill your pack from drop bags at 9.4, 20.6, 28.7, and 38.1 miles. (Or, have your handler transport these items for you.)

If we have a cold day and/or rain is forecast, the aid stations will have extra large trash bags available to convert to emergency rain ponchos. (However, you are encouraged to carry a rain jacket, if needed.)

Rest Rooms. The inconvenient truth is that there probably won't be a rest room or porta-pottie around when you need to go. Carry toilet paper in a zip lock bag. You should be able to find a convenient tree or bush to get behind if you can't make it to one of the aid stations with proper facilities.

Road Marking. The course will be marked with spray paint on the pavement. Before each turn you will see a double set of arrows indicating the direction to turn. There will be another set of double arrows at the turn and a third set of double arrows after the turn to confirm you are on the correct road. The wrong roads will be marked with a big "X" after the missed turn. Regardless, runners are expected to be aware of the race route and take some responsibility for not getting lost. Only the last 10 miles of the course will be individually marked with miles-to-go designations.

Course marking is on the left side of the road. These spray paint marks which are obvious to a runner are easy to miss when driving on the right-hand side of the road. Handlers and friends driving around the loop should use the maps and directions provided in the Race Handbook.

Traffic & Road Marshals. All of the roads on the race route will be open to traffic. Watch for traffic and be careful at all turns and road crossings. Late in the race when you are tired, remember to be extra careful as your judgment and reaction times will be impaired by fatigue. Road marshals will be at a few turns. Follow the directions of the road marshals. You may have to stop for a few seconds until the marshal says it is safe to proceed.

Handlers. Most runners rely on the aid stations for their needs. Optionally, a runner may have a personal handler and receive aid at any point along the course. Decide with your handler how frequently you want access to aid, e.g., every 2 or 3 miles. Have your handler drive ahead that distance and find a safe place to park on the right side of the road (or better yet, turn off on a side road to park completely off the race route)[1]. Your handler can then safely cross to the runner's side of the road and hand off drink or food when you come by. Tell your handler what you will want at the next handling point so he/she can have those items ready for you.

Having a handler can be a big advantage if you need special food or drink or if the weather conditions are changeable. Toward the end of the race, your handler can also monitor the progress of other runners near you. Knowing that you are catching the runners ahead can be powerfully motivating late in the race.

Tom's Tip: The best location to receive aid from your handler is at the bottom of a hill so you can walk while drinking and eating. Your handler should not stop on the road within 100 yards of the official aid stations to avoid traffic congestion and parking problems.

Pacers. Pacers are allowed for runners in either race after the Vine Valley Aid Station for the final 12 miles. Your pacer is not allowed to carry your bottles or other gear, i.e., cannot be a "mule." However, a pacer can help keep you safe and on course by being an extra set of eyes and ears. And, the right pacer can help you get through any bad patches... talking when you need to be distracted from your fatigue, being quiet when you need to concentrate on the task, telling you that you look good when you don't, etc.

For much more about the art of ultra pacing, click here for a fine article from *Marathon & Beyond*.

[1] For safety reasons, parking is prohibited along some sections of the race route and within 100 yards of aid stations; refer to the Race Handbook for specific information.

Training -- From Marathon to Ultra

Modify your favorite marathon plan and make it specific to your target race:

- Go longer and slower on your long run
- Do your long run on terrain like the target race (hills if hills, trail if trail, etc.)
- Test your race food, drink, pack, etc. on long runs
- Test your walk routine on long runs
- Keep speed work in your plan (one day a week, repeat miles or tempo runs)
- Make easy days even easier than in the marathon plan
- Take long, brisk walks on recovery / cross-training days (the active recovery can be better than doing nothing, and the walking is actually race-specific training for most of us)

Can Lake 50 Specifics

When to Start Training. Most ultra and marathon training plans call for a 24-week buildup.

- If you don't have any major race goals for the spring, you will want to begin targeted training for Can Lake in April or no later than May.
- If you will be running a spring marathon or ultra, train for that race over the winter and give it your all. After the race, take at least two weeks off from training before beginning your buildup for Can Lake.

Training Plans for First Ultras: Since the Can Lake 50 is a road ultra, the training requirements are similar to those for a marathon. If you have a marathon training plan that has worked well for you in the past, then base your training for a first ultra on that plan.

The Jeff Galloway Marathon Plan (with some modifications described here) is an especially good choice for mid-pack runners and lower mileage trainers. Faster runners and high mileage trainers, especially folks with lots of sub-3:30 marathon experience, might want to look at other plans, e.g., Jack Daniels, Hal Higdon, etc. See Additional Resources at the end of this document for some example plans.

Several key elements make the Galloway plans a good fit for ultra training:

- All long runs are to be done with a run/walk strategy (practicing what you will do in the ultra)
- Long runs build up to completing 28-30 miles (great for building both your endurance and confidence for the ultra)
- Speed work consists of repeat miles run at marathon race pace (great for building running efficiency and the pace judgment needed for the ultra)
- Plans are personalized based on your performance in shorter races scheduled every 3-4 weeks (typically, 5K race times are used to predict marathon time and training paces are then based on the marathon target time)
- Plans put a big emphasis on ensuring adequate recovery after a hard workout (fitting the motto "No Recovery, No Gain!")

How do you get a Galloway marathon plan for little money? Go to your Public Library and check out *Marathon: You Can Do It!* (Jeff Galloway, copyright 2001). If you can't find the book or want to own a copy, be sure to get the 2010 Revised Edition from your local book store or online retailer. There's even a Kindle e-book version for about $10. The book has plans for marathon time goals from 4:40 to 2:39 -- a range which will cover most runners.

Here's an example 3-week cycle from a Galloway plan (2001 edition):

Galloway Plan for 4:20 Marathon Time Goal (weeks 15-17)

Week	Mon	Tue easy run	Wed marathon pace miles	Thu	Fri marathon pace miles	Sat	Sun hard workout
15	cross train	45-55 min. no faster than 10:30 pace	25-40 min. including 0-3 miles @ 10:00 with jog recovery between each mile	cross train	45-55 min.; 25-40 min. including 0-3 miles @ 10:00 with jog recovery between each mile	off	5K race (10 miles including warm up and cool down)
16	cross train	45-55 min. no faster than 10:30 pace	25-40 min. including 0-3 miles @ 10:00 with jog recovery between each mile	cross train	45-55 min.; 25-40 min. including 0-3 miles @ 10:00 with jog recovery between each hile	off	6x1 mile @ 9:30 pace walk 4 miniutes between each repeat
17	cross train	45-55 min. no faster than 10:30 pace	25-40 min. including 0-3 miles @ 10:00 with jog recovery between each mile	cross train	45-55 min.; 25-40 min including 0-3 miles @ 10:00 with jog recovery between each mile	off	22-23 miles easy run 4 min., walk 1 min.

To get started with a Galloway plan, read the book. Sign up and run a local 5K if you haven't run one recently. Look up your predicted marathon time (the table is in the Appendices at the end of the book). Start with the marathon plan that is the closest match to your predicted time. (Note that Galloway plans assume a full six month buildup to the target race. If you already have a solid base and you have less than six months before your ultra, you can skip some of the initial weeks in the published plan.)

For another view on moving up from the marathon to an ultra, see "Additional Resources" at the end of this document. The author is famous for his successful ultras done with limited training mileage.

Plan Modifications for 50K. Because it is run on a road course, the Can Lake 50K is basically a longer marathon with some big hills. Modify your favorite marathon training plan (see previous section) to include the following:

- Do your long runs on terrain similar to the race -- pick routes that include some big hills
- Walk all uphills, run all downhills, and run/walk all the flat terrain
- Practice with the same hydration system, drinks, and snacks that you expect to use in the race

Keep in mind that the most important part of running hilly terrain is to train your legs for the downhills.

Review the course description and pay attention to the leg profiles. Use this information to plan your training runs.

Plan Modifications for 50-Mile. While the 50K is basically just a longer marathon, the 50 mile is a different animal requiring significantly more endurance. The following table shows the Galloway plan modified to train for the Can Lake 50 Mile.

Galloway Plan for 4:20 Marathon Goal Time (weeks 15-17)
Modified to Train for 50 Miles at Can Lake 50

Week	Mon	Tue marathon pace miles	Wed	Thu marathon pace miles	Fri	Sat hard workout	Sun med workout
15	Off or Cross Train	25-40 min. Including 0-3 miles @ 10:00 with jog recovery between each mile	Cross Train	45-55 min. Including 0-3 miles @ 10:00 with jog recovery between each mile	Off	5K race (10 miles including warm up & cool down)	45-55 min. No faster than 10:30 pace
16	Off or Cross Train	25-40 min. Including 0-3 miles @ 10:00 with jog recovery between each mile	Cross Train	45-55 min. Including 0-3 miles @ 10:00 with jog recovery between each mile	Off	6 x 1 mile @ 9:30 pace. Walk 4 minutes between each repeat.	45-55 min. No faster than 10:30 pace
17	Off or Cross Train	25-40 min. Including 0-3 miles @ 10:00 with jog recovery between each mile	Cross Train	45-55 min. Including 0-3 miles @ 10:00 with jog recovery between each mile	Off	22-23 miles easy Run 4 min., walk 1 min.	14-15 miles easy Run 4 min., walk 1 min.

Notice that the modified plan shifts the workouts so that 50% or more of the week's mileage is concentrated in back-to-back runs on the weekend. This shift helps build endurance. However, this shift also increases the risk of injury and potential for excessive fatigue, so it is important that the weekday runs and cross training is kept under control. The runner should do no more than called for in the schedule and, if fatigued,

should take an extra day or two off.

The 50-Mile training plan should include the following:

- Do your long runs on terrain similar to the race -- pick routes that include some big hills
- Go longer and slower on the long runs
- Walk uphills, run downhills, and run/walk on the flat terrain
- Use back-to-back runs (e.g. on weekends) to get used to covering longer distances
- Take training breaks when needed to allow for adequate recovery and reduce the risk of injury
- Practice with the same hydration system, drinks, and snacks that you expect to use in the race

Keep in mind that the most important part of running hilly terrain is to train your legs for the downhills.

Review the course description and pay attention to the leg profiles. Use this information to plan your training runs.

Predicted Race Times. Use shorter races to get a predicted marathon time (and provide some needed additional speed work). These races can be 5K, 5-mile, 10K, or even 15K. Calculators are available on the web to give equivalent times at standard race distances (see "Additional Resources" at the end of this article).

Galloway added an even simpler alternative in his 2010 Revised Edition of *Marathon: You Can Do It!* Step 1: Run a one mile time trial. Step 2: Multiply your time in seconds by 1.3 for your predicted pace for a very hard effort marathon. For example, you run the mile time trial in 7:00. That time is 7 x 60 = 420 seconds. Multiply by 1.3 and you get 546 seconds. Divide by 60 and you get 9:06 for your predicted marathon pace and a predicted marathon time of about 3:58. Add 2 minutes to the predicted marathon pace in this example and you should do your long runs no faster than 11:06 per mile (including walk breaks).

Repeat Miles. Repeat miles and timed miles can be done on any reasonably flat road if you use a Speed Distance Monitor. I use a Garmin 210. I set it up to automatically record laps at every mile and display the Average Lap Pace. After a warm up, I hit the Lap button and start the first mile, periodically checking the displayed Average Lap Pace. If the pace is too fast or too slow, I make speed adjustments. At one mile, the GPS automatically records the lap and I start the jog recovery. When ready for the next mile, I hit the Lap button again. After the last repeat mile, I cool down. Later, at home, I review the History of the run. The repeat miles are easy enough to sort out from the other laps.

Using a Heart Rate Monitor. If you are interested in training with a heart rate monitor, Galloway includes a chapter on the basics in both editions of *Marathon: You Can Do It!* For the ultrarunner, a heart rate monitor is most useful as an aid in correct pacing. Monitoring your pulse rate, especially in the first couple of mile of a run, will help you control the impulse to run too fast on easy days or to start too fast in races. In hilly races, a heart rate monitor is a great aid for learning how to slow down enough on hills to avoid going into the "red zone."

For races with hills, think Even Effort instead of Even Pace. Slow down on the hills so your heart rate and perceived effort don't increase much over what you were doing on the flat approaching the hill. If you try to maintain the same pace up the hill, you will have to slow after the hill to recover.

For a more advanced text on heart rate based training, see "Additional Resources" at the end of this document.

Avoid these common errors!

The most common errors in using a modified Galloway Plan (or any other plan) involve doing too much, too soon and/or too hard, such as...

... skipping the walks in the long runs

... running too fast in the long runs

... running the repeat miles faster than specified

... running more days per week than specified

... working too hard on cross-training days

My experience is that these errors have a cumulative effect. Initially, you feel good doing more -- but as the weeks go by, the long run and repeat-mile workouts get harder and harder to complete because of inadequate recovery. The obvious answer is to follow the plan.

For other plans and information, see "Additional Resources" at the end of this article.

Keep a Training Log

Runners who log their runs are more likely to stick to their training plans and achieve their goals. Logs come in many forms… you can just use that extra paper calendar you got in the mail or you can create a spread sheet in Excel. They still sell running log books at Barnes & Noble and on Amazon if you want something with more heft. And there are free and almost free online logs.

If you have a Garmin GPS watch, you can use Garmin Connect. Uploading workouts is quick and easy. The goals and reporting features are powerful and easy to use (e.g., tracking miles each week or for the year). One issue for me is that I have not found an easy way to back up my data for more than one page of activities at a time. Another is that the social media features are not well integrated.

My current favorite online log is AttackPoint (AP). This is a very powerful site designed by an engineer. While the aesthetics are clunky, the capabilities are first rate and fast. While originally targeted at the orienteering community, the site is now used by runners of all types. In addition to a full set of logging and reporting features, AP has all the commenting, discussion and community features you would ever need to follow and comment on the training of your friends.

The site is mostly free… an annual donation of $25 is required for some advanced features, notably upload of complete data from Garmin and Polar watches, training targets and session planning, enhanced training log/comment access controls, highlighting of threads with new messages, no ads and the ability to create private groups.

CanLake50 Training Group on AttackPoint

Gil Robs and Tom Perry have created a private group on AttackPoint for people who are training for the 2013 Can Lake 50 Ultras. Joining the group will enable you to meet online other people who are training for Can Lake and follow their training. And, at your request, the race directors can mentor you through your training for the race.

Gil Robs has put together an illustrated User Manual to help you get started on AttackPoint and join the CanLake50 Training group. The manual focuses on the feature set necessary to follow CanLake50 Training group. You should find the other features to be easy enough to figure out. If you run into difficulties, use the Group Messages feature on the CanLake50 Training group page to post your comment or question to the group.

Running the Race - Have a Plan and Follow It

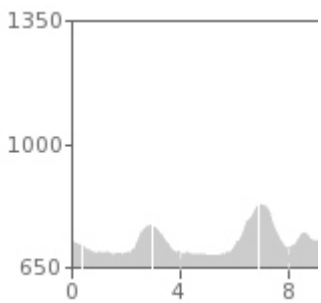
Following a plan takes discipline, but doing so is your key to a successful race. As you make your plan, keep these points in mind:

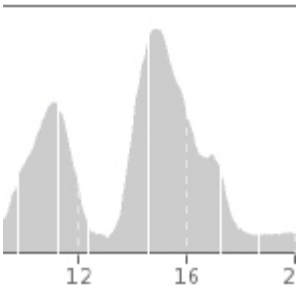
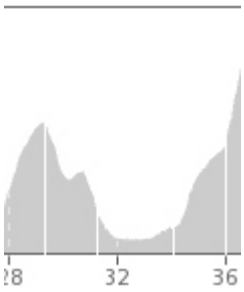
- Some elite athletes can run strongly for every step of an ultramarathon, even running all of the climbs on a hilly course.
- Ordinary runners, who would otherwise have difficulty finishing, can do the extraordinary in ultra-marathons by the simple strategy of mixing running with short walking breaks. This strategy has been demonstrated to double or triple the distance that a runner can complete compared to non-stop running.

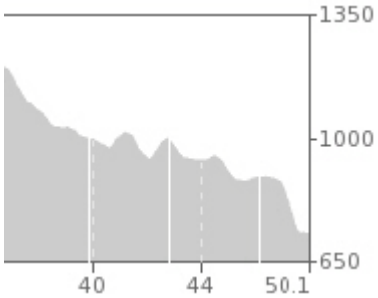
- The run/walk strategy is not just for the slow runner seeking only to finish. Fast times can be run and races won with a run/walk strategy. My own Personal Bests were all set using a planned run/walk strategy: 50 miles in 6:21; 100K in 8:00, 78+ miles for 12 hours; 128+ miles for 24 hours.
- The walk segment needs to be long enough to eat and drink, give the running muscles a break and recover a bit. Short, frequent walks work better for most, e.g., walk 40-60 seconds at the end of each run segment.
- The longer the race, the shorter the run segment should be. The fitter the runner, the longer the run segment can be. When I was a reasonably fit open runner, my run segments would be 2 to 2.5 miles for 50 mile and 100K races and 1 mile for the 12 hour and 24 hour. As a less fit super veteran runner, my run segments are now 1 mile or less for the 50K and 6 hour.
- Have reasonable expectations - start at a sustainable running pace and run/walk strategy. Ultras are not won in the first 20 miles. Your goal for a 50K or 50 Mile should be to maintain the same run/walk strategy for the whole race with only a slight slowing of your running pace as you get tired.
- Include scheduled walks from the start on flat courses. Also, include scheduled walks in any long flat sections of a course with hills. As most ultras do not have every mile marked, it makes sense to use time to schedule walks. For example, run 10-15 minutes, walk 40-60 seconds.
- Walk all hills from the start on hilly courses. If hill seems too easy to walk all of it, alternate running and walking (e.g., run 100 meters, walk 50 meters, repeat to the top). If the gradient changes, do your run segments on the easier bits and walk the harder bits.
- Eat and drink while walking (carry a water bottle and food). Carry two water bottles on hot days or if the distance between aid stations is more than an hour.
- Spend as little time as possible in the aid stations. Treat them like a NASCAR pit stop. Decide what you want before you get to the aid station. Pull in, give your bottle to a volunteer to be refilled, grab something to eat and walk out of the aid station as soon as you have your bottle back.
- When things go wrong, fix them quickly. Eat if you are starting to bonk. Take an electrolyte capsule if you are starting to cramp. Fix your feet if you are starting to blister, apply Vaseline if you are starting to chaff, and so on.
- The hardest part of an ultra is often the middle miles or even getting to halfway. It is easy to get freaked out by the distance or time remaining. Don't think about how many miles or hours remain. Take the distance one chunk at a time. Just think about getting to the next aid station, getting to the next walk break, getting to the top of the next hill, getting to the next power pole.
- Maintain relentless forward progress until you finish.

Can Lake 50 Specifics

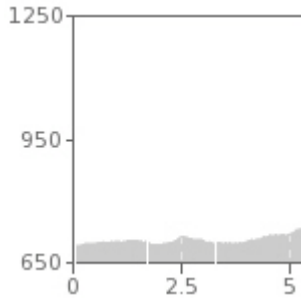
50-Mile Strategy Recommendations

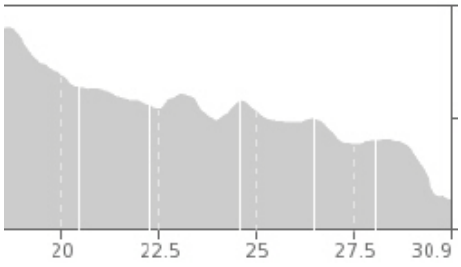
50-Mile Legs 1 and 2 9.4 miles 	**Start to Onanda Park** These two legs have an easy hill at about 3 miles, a medium climb at about 6.5 miles and another easy hill at 8.5 miles. There is an aid station at 4.6 miles. *Minimum run/walk strategy (e.g. for fit, experienced ultra runners):* Walk the steeper portions of the three hills and do a short walk out of the aid station. *Recommended strategy (e.g. for first time ultra runners and those going 50 miles for the first time):* Include a scheduled walk break at about 2 miles and walk all of the three hills. *Fluids & Nutrition:* Start eating and drinking within 30 minutes of the start.

50-Mile Legs 3, 4 and 5 11.2 miles 	**Onanda Park to Monica's Pies** These three legs are mountainous by comparison. *Minimum run/walk strategy:* Walk the steeper portions of the two major climbs and do a short walk out of the Onanda Park and Seneca Point aid stations. *Recommended strategy:* Walk all of the two major climbs and do a short walk out of the Onanda Park, Seneca Point and Bristol Springs aid stations. Walk the short uphill about halfway down to the lake from Bristol Springs. *Fluids & Nutrition:* Carry a bottle and food. Eat and drink while walking these two big climbs.
50-Mile Legs 6 & 7 8.1 miles 	**Monica's Pies to Middlesex** Be sure to top up your bottle(s) and grab something to eat before leaving the Monica's Pies and Sunnyside & West aid stations. These legs are gently rolling with a gradual elevation gain to Middlesex. *Minimum run/walk strategy:* Walk out of each aid station and insert a walk break at a convenient hill, e.g., on Parish climbing to intersection with 245 and midway to Middlesex. *Recommended strategy*: Run 10-15 minutes and insert a walk at the next convenient little hill. Repeat until done. *Fluids & Nutrition:* Remember to eat and drink enough on these legs. Drink a little every time you walk.
50-Mile Legs 8, 9,&10 9.4 miles 	**Middlesex to Bare Hill** These three legs include the last major climbs of the 50 miles around the lake separated by a 2.8 mile out and back along the lake shore. The climb out of Middlesex is long but not steep. The climb out of Vine Valley is in two parts. The first is long and gradual. The second is short and quite steep. *Minimum run/walk strategy:* Alternate running and walking on the long gradual climbs, walk out of the aid stations; walk all of the short, steep climb of Bare Hill Road. *Recommended strategy:* Alternate running and walking on the long gradual climbs (with more walking than running); walk out of the aid stations; walk the short climbs on the rolling out and back along the lakeshore, and walk all of the short, steep climb of Bare Hill Road. *Fluids & Nutrition:* Carry a bottle and food. Drink a little every time you walk. Eat and drink while walking the two big climbs.

50-Mile Legs 11, 12 & 13 12.0 miles 	**Bare Hill to Finish** The closing miles of the race are flat to gently rolling with a gradual loss of elevation. *Minimum run/walk strategy:* Walk out of each aid station and insert a walk at some convenient hill approximately halfway to the next aid station. If you are feeling frisky, you can skip the extra walk after the Kipp Road station. *Recommended strategy:* Insert two walk breaks between each aid station, e.g., run 10 minutes and walk at the next convenient small hill. *Fluids & Nutrition:* Remember to eat and drink enough on these legs. Drink a little every time you walk.

50K Strategy Recommendations

50K Leg 1 5.4 miles 	**Start to Sunnyside & West** This leg is gently rolling to flat. *Minimum run/walk strategy (e.g. for fit, experienced ultra runners):* Insert a brief walk at about 1.0 mile where Parish Road climbs to intersect Route 245. *Recommended strategy (i.e. for first time ultra runners and those doing a first ultra road race):* From the start, run 10-15 minutes and insert a brief walk at the next convenient hill for three to four walks over the 5.4 miles. *Fluids & Nutrition:* Begin eating and drinking no later than the turn onto Route 245.
50K Leg 2 4.3 miles 	**Sunnyside & West to Middlesex** This leg is gently rolling as it gradually climbs to the Village of Middlesex. *Minimum run/walk strategy:* Insert one walk at a convenient hill midway to Middlesex. *Recommended strategy:* Run 10-15 minutes and insert a walk at the next convenient hill for two or three walks over the 4.3 miles. *Fluids & Nutrition:* Remember to eat and drink enough on this leg. Drink a little every time you walk.
50K Leg 3 3.9 miles	**Middlesex to Vine Valley** This leg has the first of two major climbs in the 50K. Be sure to top up your bottle(s) and grab something to eat before leaving the Middlesex aid station. The climb out of Middlesex is long but not steep. *Minimum run/walk strategy:* Alternate running and walking on the long gradual climb. After the first big downhill on South Vine Valley Rd, there is a short uphill that makes a good place for a short walk. *Recommended strategy:* Alternate running and walking on the climb out of Middlesex, except with more walking and less running. Walk all of the short ups that break up the downhill to Vine Valley.

	Fluids & Nutrition: Carry a bottle and food. Eat and drink while walking the climbs.
50K Leg 4 2.8 miles 	**Vine Valley to Turnaround and Back Again** This leg drops down to the lake level and then rolls along to the turnaround. *Minimum run/walk strategy:* Walk out of the aid station and then insert a walk break at the turnaround. Smile for the photographer recording your arrival. *Recommended strategy:* Walk out of the aid station and walk the short climbs on the rolling out and back along the lakeshore. *Fluids & Nutrition:* Carry a bottle and food. Eat and drink each time you walk.
50K Leg 5 2.7 miles 	**Vine Valley to Bare Hill** This leg has the biggest and last major climb in the 50K. The fun starts with a steeply climbing hairpin turn where North Vine Valley Rd turns away from the lakeshore. The rest of the climb on North Vine Valley Rd is long and gradual. Once you turn onto Bare Hill Rd, the climb is short and quite steep. *Minimum run/walk strategy:* Walk the steep hairpin turn. Switch to running when the grade eases. Walk the steeper bits of the gradual climb. After the turn onto Bare Hill Road, walk the entire short, steep climb. *Recommended strategy:* Walk the steep hairpin turn. Switch to alternating running and walking on the long gradual climbs (with more walking than running), and walk all of the short, steep climb of Bare Hill Road. *Fluids & Nutrition:* Carry a bottle and food. Eat and drink while walking this long climb.
50K Legs 6, 7 & 8 12.0 miles 	**Bare Hill to Finish** The closing miles of the race are flat to gently rolling with a gradual loss of elevation. *Minimum run/walk strategy:* Walk out of each aid station and insert a walk at some convenient hill approximately halfway to the next aid station. If you are feeling frisky, you can skip the extra walk after the Kipp Road station. *Recommended strategy:* Insert two walk breaks between each aid station, e.g., run 10 minutes and walk at the next convenient small hill. *Fluids & Nutrition:* Remember to eat and drink enough on these legs. Drink a little every time you walk.

Food and Drink

Ultras are too long to be run on just plain water. Most of the calories needed to finish an ultra come from stored fat but some carbohydrates need to be replaced each hour to avoid bonking (hitting the wall). Many runners find it helpful to also replace electrolytes.

- 50 grams per hour is a bare minimum target for carbohydrate replacement for average runners. That's a minimum of 200 calories from carbohydrates in food and fluids consumed each hour.
- Drinking to thirst works well for most runners. Carry a 16-20 ounce bottle with water or sports drink and drink to thirst each time you take a walk break.
- Short ultras can be done on gels and fluids, especially if you are both fit and fast.
- Some runners get good results with bananas, defizzed *Coke* and *Gatorade* despite the high fructose content.
- Real food is often eaten in longer ultras.
- Some runners use liquid foods like *Ensure* or specialty products like *GU Roctane*.
- Experiment and find what works for you. Bring your own favorite foods and drinks to the race. Put supplies in drop bags or set up your own mini-aid station at the Start/Finish on loop courses.
- Sometimes your stomach will rebel at foods that worked before. When what worked before stops working, try something else. At times like that, the appropriate food is anything you can tolerate.

For more information, see "Additional Resources" at the end of this document.

Can Lake 50 Specifics

Fluids. The Can Lake 50 aid stations will have water, *GU Electrolyte Brew* and a cola drink. You should test *GU Electrolyte Brew* on training runs. Your local running store may have the product or you can order it from GU Energy Labs. The cola drink will be carbonated so you should plan to drink it at the aid station (i.e., don't fill your bottle with it).

If you find you need fluids that we won't have at the aid stations, you will need to have a handler or use drop bags. The drop bag locations are 10-12 miles apart. Two bottles supplemented by water at the aid stations will be enough to get you to the next drop bag to pick up another two bottles with your favorite fluid.

Food. The Can Lake 50 aid stations will have *GU Energy Gel* packets, cookies, potato chips, M & M's, and at select stations: *GU Chomps*, PB&J sandwiches, fruit and salt potatoes. You should test *GU Energy Gel, GU Chomps* and other foods on your training runs.

If you want something different to eat, you will need to have a handler or use drop bags. Carry enough of your favorite snacks to get you to the next drop bag location where you can refill your pack.

At the Finish

- Turn in your timing chip.
- Check the posted results. Be sure to pick up your medal at the Finish before you leave.
- Eat and drink some within an hour of finishing. It will help your recovery.
- You may not be in shape for a long drive after finishing a hard ultra... legs will be sore and you will be tired. Have someone drive you home or plan an overnight stay.

Post-Race Recovery

- If your legs are sore (it hurts to run), then don't resume running until you are pretty much free of pain. Typically this takes 3-4 days if you have, for instance, trashed your quads.
- While your legs hurt, do something else for active recovery. Walk if you can do that with tolerable pain or ride a bike. Avoid impact exercise until the legs stop hurting.
- When you can resume running, go easy and give your body a chance to repair any lingering damage.

- As you resume training, you should find your short runs will feel good within a week or two at most. You may even be able to run a decent 5K after two weeks recovery.
- If you try a long run only a couple weeks after a hard ultra, you will probably feel very tired and sluggish after 10-15 miles. I have found my endurance comes back slower after an ultra than my short race speed (what little speed I have, anyway). It usually takes about 4 weeks before a long run feels comfortable.
- Allow 3-6 months between ultras to 1) adequately recover and 2) adequately train for the next race. The longer the race and the harder the effort, the longer the gap between races should be for optimal performance.

Can Lake 50 Specifics

If your quads are sore and you have to go down stairs backwards, the downhills on the course beat you up. Wait until you are pain free to resume running.

Additional Resources

Online Training Plans

In addition to the training plans described previously, there are many other training plans available on the internet, including some specifically for ultramarathons.

- ***Santa Clarita Runners Ultra Schedule***. The Santa Clarita Runners in California have an online application that will generate a training schedule for you. You enter the date of your race and select the distance (either 50K or 50 Miles). The application returns a table with daily workout from the current date to race day. The table can be downloaded as an Excel spreadsheet. The Santa Clarita schedule is a one-size-fits-all approach, i.e. no personalization for your level of fitness. There's no advice on pacing the training runs and no speed work in the plan. Distance is the only thing that changes day to day. The Santa Clarita Runners plan is at http://www.scrunners.org/ultrasch.php.
- ***Kevin Sayers' UltRunR***. Kevin Sayers hasn't added to the site since 2004 but it remains the best site for sound old-school information on all topics related to ultrarunning, including a great deal of training info (www.ultrunr.com).
- ***ULTRAmarathonRunning***. The Training page at ULTRAmarathonRunning.com has links to a wide variety of additional training resources. Some of the links are to training information for popular trail races: www.ultramarathonrunning.com/training/index.html.

Magazines

- ***Ultrarunning*** (www.ultrarunning.com) - national online calendar and print magazine for and by runners. Extensive trail and road ultra reports and feature articles.
- ***Trail Runner*** (www.adventuresports.com/pub/trailrunnermag/) - covers trail races of all lengths. Slick color, glossy magazine.
- ***Marathon and Beyond*** (www.marathonandbeyond.com) - high quality feature articles by talented writers, no calendar or race results. Sample articles are posted online.

Articles and Books

- ***Marathon: You Can Do It!*** (Jeff Galloway, Shelter Publications, 2010 revised edition). Can Lake 50 Race Director recommends this book. Galloway's training plans are a good fit for a first 50K or 50-mile.
- ***The Marathon As a Springboard*** (Jeff Hagen, www.marathonandbeyond.com/choices/hagen.htm). Article on moving up from road marathons to ultras. The author is famous for his successful ultras done with limited training mileage.
- ***Total Heart Rate Training: Customize and Maximize Your Workout Using a Heart Rate Monitor*** (Joe Friel, Ulysses Press, copyright 2006). The book covers multiple sports, including running. Rather than using one of the many calculators for maximum heart rate, the book describes how to determine your lactate threshold heart rate and how to use that value in your training. In addition to a good description

on setting goals and coming up with a training plan, the author also provides tips on how to modify the plan to ensure adequate recovery time for runners over 40.

- ***Ultra-Pacing*** (Theresa Daus-Webber, www.marathonandbeyond.com/choices/dausweber.htm). Extensive article on the art of pacing your runner to the finish.
- ***The Science of Sport*** (www.sportsscientists.com). Scientific comment and analysis of sporting performance, including some ultra-specific reporting.
- ***Lore of Running*** (Tim Noakes, Human Kinetics, 2002 fourth edition). Pretty much everything that is known about running has been collected into this book including extensive coverage of ultras.

Online Calculators

- ***Marathon Guide Calculator*** (www.marathonguide.com/fitnesscalcs/predictcalc.cfm). Calculator for estimating equivalent times at standard race distances.
- ***WMA Age-Graded Scoring*** (www.howardgrubb.co.uk/athletics/wmalookup06.html). Calculator to score your own races. Results button can be used to estimate equivalent times at different distances (or different ages).

Food and Drink

- ***Sports Scientists Series on Exercise and Dehydration*** (www.sportsscientists.com/2008/01/featured-series-on-science-of-sport.html). The 2007 five-part series on Exercise and Dehydration is valuable enough to list the articles here:
  Part I: History of fluid intake during exercise and the evolution of the sports drink industry
  Part II: Why dehydration does NOT CAUSE heat stroke
  Part III: Drinking to thirst - what we learn from research in the field and elite athletes
  Part IV: Why DRINKING to thirst is the optimal way to drink
  Part V: Do sports drinks really help prevent electrolyte loss, dehydration and impaired performance?
- ***Sports Scientists Series on Muscle Cramps*** (www.sportsscientists.com/2007/11/sports-drinks-sweat-and-electrolytes.html). Putting it all together, here's the key concluding quote from the series: *"So bottom line - drink to thirst, don't worry too much about what you drink, but just make sure you are getting enough ENERGY in - the one thing that the sports drinks provide that is required is glucose, and so plain water is unlikely to be sufficient for longer than about 2 hours of exercise."*

Groups and Regional Race Calendars

- ***Ultrarunning Matters*** (http://ultrarunningmatters.org). An ultrarunning club and supportive camaraderie, also the organizer of the Can Lake 50 Ultras, the Mind the Ducks 12 Hour and the Green Lakes Endurance Runs.
- ***Western New York Ultras*** (www.wny-ultra.org). The Western and Central New York region has a plethora of ultras... road races, trail races, timed races, flat and fast courses to technical trails with thousands of feet of climbing. The 2013 calendar lists 15 events.
- ***Ontario Ultra Series*** (www.ouser.org) - If you can't find a Western New York ultra that fits your schedule and interests, the Ontario Ultra Series is a 12-race series over a wide variety of running course throughout Ontario.
- ***Oven Door Runners*** (www.odrunners.org). Local Rochester informal running group that includes many ultra runners.

Got Questions about training for the Can Lake 50 that aren't answered here?

Want more advice on how to train for and run the race?

Send your questions to Tom Perry (tperry01@rochester.rr.com)